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## Comparing Strawberries and Quandongs: A Cross-National Analysis of Crisis Response Strategies

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### Abstract

The present study expands recent cross-sectional crisis response research identifying eight distinctive crisis response strategies (Diers, 2009) emerging from more than 40 individual tactics identified by predominantly case-study research in crisis communication (see, e.g., Benoit, 2004; Mohamed, Gardner, & Paolillo, 1999). This research tested previous findings industry and crisis type as critical factors affecting the selection of crisis response strategies by organizations in their public statements following a crisis. However, it also expands previous research by evaluating the effects of a corporation's nation of origin, comparing social media versus traditional media as channels of engagement, and time in the crisis development as potential factors also affecting an organization's crisis response.

Therefore, this study followed eleven organizations in five industries from five different nations facing three distinctive types of crises over a period of eight weeks analyzing messages in press releases, social media (e.g., Facebook and Twitter), and traditional media (i.e., print and broadcast). Findings largely support previous research on the emergence of distinctive crisis response strategies and demonstrate the importance of considering industry, crisis type, nation, channel, and time as critical factors affecting the strategic response to crises.

**Keywords:** Crisis response strategies, crisis communication, public relations

### Crisis Response Today

*When written in Chinese the word "crisis" is composed of two characters - one represents danger and the other represents opportunity. ~John F. Kennedy, address, 12 April 1959*

For much of the last decade the news across the West has been dominated by crises—news of wars, corruption and misdeeds by business and government officials alike, natural disasters, and a global economic crisis as the most notable examples. There has been much case study work addressing corporate accidents and reputational crises (Carroll, 2009), natural disasters (e.g., Benoit & Henson, 2009; Berger, 2009), as well as issue management (de Brooks & Waymer, 2009) to name just a few. Taken together, we believe the next step for the study of crisis response strategies is to focus on how tactics combine into public relations/ public affairs responses to situations over across the crisis's emergence and life so that we can more meaningfully construct and test models of effective crisis response discourse. Though this

challenge for analyzing critical variables together has been out for over a decade (Coombs & Holladay, 2002; 1996), there remains a dearth of research addressing these issues (Coombs, 2007).

Additionally, very little crisis response research has addressed the role that the organization's nation of origin might have on the crisis response messages created and disseminated—despite arguments and analysis indicating that in an increasingly global world conflict and crises within a nation can have transnational implications (Molleda, Connolly-Ahern, & Quinn, 2005; Moore, 2004). Analysis that, given the current global financial crisis, natural disasters, and accidents dominating the headlines, suggests that our organizations are not longer just speaking to audiences within their own countries—or the countries where they are conducting their business, but must also engage global stakeholders. This is only amplified by the use of the Internet (Krishnamurthy & Kucuk, 2009). Yet, expanding our fields of interest in the nation studied has functionally meant moving our case studies from those of American corporations (Greer & Moreland, 2003) to case studies in other nations (Chen, 2009). Though these studies have afforded us useful information, they do not actually compare cross-national responses to crises.

Therefore, the goal of this study is to build on previous research identifying strategies (Diers, 2009) emerging from tactics to test the veracity of those strategies as well as to evaluate the role that nation, channel, and time have on the use of crisis response strategies. In so doing, this study paper reviews key variables, describes the data collection and analysis methods, reports the results, and discusses both the practical and theoretical implications of this research.

### **Literature Review**

When well-managed, organizational crises can serve a number of functions for an organization, but every crisis also presents an array of risks for organizations. For example, organizational crises can lead to more effective organizational learning (Chen, 2009; Roux-Dufort, 2000), they can help point out areas of an organization's culture that have to change because it is detrimental to the organization's capabilities (Ross & Benson, 1995), and crises can point out systemic flaws in organizations' abilities (Argenti, 2002; Benoit & Henson, 2009; Greer & Moreland, 2003). However, organizational crises—by their very nature—also represent a credible threat to an organization's well-being (Carroll, 2009; Hayes & Patton, 2001; Pearson & Clair, 1998). For example, these threats can include conflicts between the needs of shareholders and victims of accidents (Marcus & Goodman, 1991), damage to the organization's image (Elsbach, Sutton, & Principe, 1998), or they can even jeopardize the livelihood of an organization (King, 2002).

Yet clearly, organizations—especially those in crisis—do not exist in a vacuum. Context, situation, and environment are critical components for organizations coping with day-to-day business, let alone crises (Coombs, 2007). Environments are dynamic, not dependable, nor particularly stable because they are

changed by what organizations do and how people perceive their environment (Sutcliffe, 2001; Trice & Beyer, 1993). Negotiation of the environment, the variance in situations, and potential for both similarity and difference in crisis experience is at the heart of the argument that a thorough understanding of the features affecting a crisis situation can help us better understand organizational crises, communication, and outcomes (Seeger, 2002).

### **Industry**

One such component of the context is the industry to which an organization belongs. Industry has long been posited as a factor that would likely influence an organization's reaction to crises (e.g., Arpan, 2002; deBrooks & Waymer, 2009; Glynn, 2000; Millar, 2004). Previous research addressing organization type and crisis response has three central findings. First, niches and sectors are likely to influence organizational reactions to crises (Arpan, 2002; deBrooks & Waymer, 2009; Massey, 2001; Millar, 2004). Second, the type of work an organization performs, its routines, and multiple dimensions of that organization's identity can often place restraints on an organization's responses to crises (Ginzel, et al., 1993; Glynn, 2000). Third, industries are meaningful ways to group organizations the similarities shared by those organizations should reflect similar functions and communicative needs (Bureau, 2002; Glynn, 2000).

Because of this foundation research, organization type or industry was tested in Diers' (2009) research and found to be a significant factor in predicting the crisis response strategies that an organization would use. However, the strength of this effect was not as strong as previous research indicated that it should be. One explanation is certainly that there may be less industry conformity than previous researchers might have believed. However, in evaluating the study design it seems more likely that the breadth of Diers (2009) study—evaluating 18 different industries with a total of 133 unique crises and only 399 messages total—indicates that there may not have been sufficient data to effectively test each of those 18 industries. This suggests that in a deeper cross-industry analysis would likely yield a stronger result for the role that industry would have on an organizations crisis response strategy. Therefore, we propose the following hypothesis:

**Hypothesis 1:** The industry of an organization in crisis will affect its approach to crisis response.

### **Crisis Type**

Several authors (e.g., Coombs, 2007; Coombs & Holladay, 1996; 2002; Hearit, 1999; Pearson & Mitroff, 1993; Seeger, 2002) argue that the context for a crisis is of vital importance in determining appropriate organizational responses. Table 1 identifies a typology of crises that organizations are likely to face, based on those identified across the crisis communication literature and drawing heavily from a typology that

Coombs and Holladay (2002) created and that Coombs (2007) argues represents victim, accidental, and preventable clusters. Yet these previous groupings of crises are not comprehensive and mix situations where the organization would likely be at fault versus not at fault as well as situations that cannot be controlled with those that can be more readily managed. We believe that the typology discussed here offers a more clear, testable, and robust heuristic.

Table 1

**Types of Crises**

<i>Crisis Category</i>	<i>Crisis Type</i>	<i>Definition/Example</i>	<i>Key Author(s)</i>
Organizational Transgressions	Illegal Corporate Behavior	Intentional or unintentional activities of an agent or organization, done for the organization's benefit. Examples: conspiring to fix prices, antitrust violations, disparate treatment involving discrimination, patent infringement, securities fraud	Baucus & Baucus (1997), Coombs & Holladay (2002), Hearit (1999), Pearson & Clair (1998)
	Technical Breakdown Accident	Accident caused by technology or equipment failure. Example: airline crashes	Coombs & Holladay (2002), Hearit (1999), Marcus & Goodman (1991)
	Technical Breakdown Product Recall	Recall of a product because of technical or equipment failure	Coombs & Holladay (2002), Hearit (1999), Marcus & Goodman (1991), Pearson & Clair (1998)
	Megadamage	A technical breakdown accident that produces significant environmental damage. Example: the Exxon Valdez crash	Coombs & Holladay (2002), Pearson & Clair (1998)
	Human Breakdown Accident	Industrial accident caused by human error.	Coombs & Holladay (2002), Hearit (1999), Marcus & Goodman (1991)
	Human Breakdown Recall	Product recall that is a result of human error.	Coombs & Holladay (2002), Hearit (1999), Marcus & Goodman (1991), Pearson & Clair (1998)
	Organizational Misdeed with No Injuries	Occurs when management knowingly deceives stakeholders, but no injury results to stakeholders.	Coombs & Holladay (2002), Hearit (1999), Marcus & Goodman (1991)
	Organizational Misdeed with Injuries	Occurs when management knowingly places some stakeholders at risk and some are injured and/or killed.	Coombs & Holladay (2002), Hearit (1999), Marcus & Goodman (1991)

Table 1 Continued

Organizational Events	Mergers and Failed Mergers	Combination (or failure to) combine, to some degree, with another organization.	Basham (2001), King (2002)
	Strikes	The stoppage or threat to stop work at an organization by a union or group of workers with specific goals of negotiation with management Examples: downsizing or layoffs	Gonzales-Hererro & Pratt (1998)
	Economic Downturns Resulting in Organizational Action		Basham (2001); King (2002)
	Workplace Violence	Attacks on the job by organizational members or former members resulting in violence. Examples: Post Office Shootings, Columbine, Sexual Harassment	Coombs & Holladay (2002), Pearson & Clair (1998)
	Rumor	The circulation of false information designed to hurt the organization.	Coombs & Holladay (2002), King (2002); Pearson & Clair (1998)
	Malevolence/ Product Tampering Challenge	Damage of products or services by an external agent that harms the organization  Confrontation by disgruntled stakeholders claiming the organization has acted wrongly. Examples: Pressure Group Activism, Boycotts	Coombs & Holladay (2002), Pearson & Clair (1998) Coombs & Holladay (2002), Heath (1996), Pearson & Clair (1998)
	Shifting Political Attitudes	As the political attitudes change products, services, company ideals, etc. become less desirable to stakeholders	Basham (2001)
	Natural Disasters	Naturally occurring event that harms the organization and/or its stakeholders. Examples: Tornado, Earthquake	Basham (2001), Coombs & Holladay (2002), Gonzales- Herrero & Pratt (1998), Pearson & Clair (1998)
	Terrorist Attack	Actions by an outside agent with an array of impacts from loss of stakeholders, employees, infrastructure, collapses in demand, significant secondary effects (e.g., customer service, breakdowns in transportation and communication)	Argenti (2002), Gonzales-Herrero & Pratt (1998), Pearson & Clair (1998)

Previous research addressing crisis type and strategic crisis response has three central findings. First, crises range in magnitude from small internal issues with few potential effects to those whose magnitude can affect the environment, millions of lives, and an organization's survival (e.g., Hearit, 1999; Malone & Coombs, 2009; Pearson & Mitroff, 1993). Second, the type of crisis is a vital determinant of an organization's response (Coombs, 2007; Coombs & Holladay, 2002). Third, crisis types include: organizational transgressions (i.e., blame can be attributed to the organization, regardless of the organization's intent); organizational events (incidents either in or outside of the organization's locus of

control but that emerge as crises); and external events leading to crises (such crises are entirely outside of an organization's control, but still represent an image risk to the organization).

Diers' (2009) tested previous predictions about the role of crisis type (see Coombs & Holladay, 1996) on crisis response strategies finding there were strong indications that crisis type influences the selection of strategies. Diers found that contrary to previous assumptions (see, e.g., Coombs & Holladay, 1996), during organizational transgressions instead of employing image-oriented strategies, organizations were more likely to employ a defensive strategy (see Table 2) incorporating elements of anti-social or defensive, accommodative, and framing the crisis tactics (see Table 3).

Diers' (2009) research did, however, largely confirm previous predictions regarding organizational events finding that during these crises organizations were most likely to use explanative and offensive (see Table 2) strategies combining framing the crisis, framing the organization, anti-social or defensive, excellence, and invoking interorganizational relationships as tactics most typically. Though confirming previous research, in finding the substantial use of excellence and invoking interorganizational relationships as tactics, this research added to our understanding of organizational events.

Table 2

**Crisis Response Message Strategies**

Strategy	Definition	Tactics Included	Predictors of Strategy
Future-Oriented	CRSs emphasize moving forward, even to the point of avoiding discussing present circumstances, present situation, or practices	Self-Enhancement, Excellence/ Renewal, &/or IOR's	Crisis Prone Organizations
Present-Oriented	CRSs emphasize tackling the crisis directly—talking about the organization's role and/or actions taken	Framing the Crisis, Framing the Organization, Anti-Social/Defensive, Accommodative, IOR's	Non-Crisis Prone Organizations
Aggressive	CRSs tell stakeholders what is (not) occurring and actively involves being defensive about organization's role or culpability	Framing the Crisis, Anti-Social/ Defensive	Utility Industry, Information Industry, Arts/ Entertainment/ Recreation Industry, Events Outside the Organization's Control, Organizational Transgressions <sup>1</sup>
Defensive	CRSs emphasize denying or minimizing the organization's culpability or role, but also actively involves efforts to increase organization's image	Anti-Social/ Defensive, Accommodative	Manufacturing Industry, Administrative Support & Waste Remediation Industry, Organizational Transgressions

Table 2 Continued

Explanative	CRSs endeavor to create good will while explaining the crisis—characterized by openness, engagement, and an appearance that the organization is sympathetic to the situation	Framing the Crisis, Accommodative	Accommodation Industry, Finance/ Insurance, Organizational Events, Organizational Transgressions <sup>1</sup>
Offensive	CRSs endeavor to create many possibilities to appeal to many different stakeholder groups by including a variety of strategies in a single message	Any of the strategies in combination with three or more prominent strategies in the message	Transportation & Warehousing, Health & Social Assistance, Public Administration, Organizational Transgressions, Organizational Events
Single Tactic	Simple CRSs emphasizing only a single tactic in the message.	Any of the tactics	Professional/ Scientific/ Technological Industry, Management of Companies Industry, Educational Services Industry, Mining Industry, Construction Industry, Retail Trade Industry, Agriculture/ Forestry/ Hunting/ Fishing Industry, Wholesale Trade

Finally, with regard to events outside the organization's control, Diers' (2009) research only partially supported previous research that organizations would frame the crisis, frame the organization, and use anti-social or defensive tactics most (Coombs & Holladay, 1996). Instead, Diers found that during these events organizations would use a more aggressive strategy (see Table 2), framing the crisis, incorporating anti-social or defensive tactics, and incorporate routine communication efforts (see Table 3) most often.

Table 3

**Taxonomy of Crisis Response Tactics Potentially Used By Organizations**

<i>Strategy Category</i>	<i>Strategy</i>	<i>Strategy Description</i>	<i>Example Key Author(s)</i>
Self-Enhancement	Marketing	Emphasizing product quality, prices, safety, promotions	Heath (1994), Proto & Supino (1999), Scott & Lane (2000) Heath (1994; 1998), Scott & Lane (2000)
	Image Advertising	Providing information to make the organization look positive. Framing an issue for the stakeholders	
Routine Communication	Communication of Mission/ Vision	Communication emphasizing organizational goals/ mentioning mission/ vision	Heath (1994)



Table 3 Continued

Framing the Crisis	Annual Reports	Report monetary assets, liabilities, future liabilities, interest in cooperation to increase market value	Heath (1994), Proto & Supino (1999)
	Newsletters	Report monetary gains, attention to stakeholder concerns	Fiol (1995), Heath (1994), Proto & Supino (1999)
	Accounts	Development of dominant narrative, use of narrative to explain the problem	Kauffman (2001), Massey (2001), Mohamed, et al. (1999)
	Information Dissemination	Delivering information regarding the issue to educate, often with the goal of increasing stakeholder sense of empowerment	Martinelli & Briggs (1998), Rowan (1996), Sellnow (1993), Slovic (1987)
	Issue Salience	Communicating importance, often uses risk or fright factors and/or scientific discourse	Bennett (1998), Sellnow (1993), Slovic (1987), Williams & Olaniran (1998)
	Preconditioning	Influencing stakeholders to the organization's position on a crisis and their opinions about the organization by: downplaying damage, putting act in a more favorable context, or attacking accusers	Benoit (2004; 1997), Sturges (1994)
Framing the Organization	Ingratiation	Efforts to create positive image by reminding stakeholders of past good works or qualities	Coombs & Schmidt (2000)
	Organizational Promotion	Presenting the organization as being highly competent, effective, successful	Marra (1998), Mohamed, et al. (1999)
	Issue Management	Issue diagnosis, advocacy advertising	Cheney & Christensen (2001), Gonzales-Herrero & Pratt (1998), Hayes & Patton (2001)
	Supplication	Portraying the organization as dependent on others in effort to solicit assistance	Mohamed, et al. (1999)
	Organizational Handicapping	Making task success appear unlikely in order to have ready-made case for failure	Mohamed, et al. (1999)
	Bolstering	An effort to separate the organization from the crisis by emphasizing past accomplishments, stress good traits	Benoit & Czerwinski (1997), Benoit (2004), Coombs & Schmidt (2000), Kauffman (2001), Sellnow & Brand (2001)
Anti-social or Defensive	Noncompliance	The organization cannot/ does not choose to act	Henriques & Sadorsky (1999)
	Disclaimers	Explanations given prior to an action that might be embarrassing to ward off negative implications to image	Mohamed, et al. (1999)
	Defensive Compliance Evasion of Responsibility	Indicating that actions are driven by compliance or requirements De-emphasizing role in blame by: emphasizing lack of control over events; emphasizing accident; or emphasizing good intentions	Henriques & Sadorsky (1999) Benoit (2004; 1997), Benoit & Czerwinski (1997), Coombs & Holladay (2002), Coombs & Schmidt (2000), Henderson (2003), Ray (1999)

Table 3 Continued

Accommodative	Shifting the Blame	The most defensive strategy—shifting or minimizing responsibility for fault	Benoit (2004), Benoit (1997), Coombs & Holladay (2002), Coombs & Schmidt (2000), Ray (1999)
	Simple Denial	The organization did not perform the act	Benoit & Czerwinski (1997), Benoit (2004), Coombs & Schmidt (2000)
	Strategic Ambiguity	Not releasing many details, able to keep stories consistent	Sellnow & Ulmer (1995), Ulmer & Sellnow (2000), Sellnow & Ulmer (2004)
	Intimidation	Representing the organization as powerful or dangerous, willing and able to adversely affect those who oppose its efforts	Mohamed, et al. (1999)
	Minimization	Emphasizing act or event not serious	Benoit (2004: 1997), Benoit & Czerwinski (1997), Coombs & Schmidt (2000)
	Transcendence	Emphasizing more important considerations	Benoit & Czerwinski (1997); Benoit (2004)
	Corrective Action/Compensation	Effort to 'correct' actions adversely affecting others. Can include announcements of recall or offers of compensation	Benoit (2004; 1997), Benoit & Czerwinski (1997), Coombs & Holladay (2002), Coombs & Schmidt (2000), Henderson (2003), Martinelli & Briggs (1998), Mohamed, et al. (1999), Ray (1999)
Accommodative (continued)	Apologia	Communication of contrition, admission of blame including remorse and requests for pardon, mortification	Benoit (2004; 1997), Benoit & Czerwinski (1997), Coombs & Holladay (2002), Coombs & Schmidt (2000), Hearit (1999), Henderson (2003), Martinelli & Briggs (1998), Mohamed, et al. (1999)
	Compassion	Communication of concern over well-being/ safety of public; helping people psychologically cope with crisis	Martinelli & Briggs (1998), Mohamed et al., (1999), Sturges (1994)
	Offering Reassurances	'This will never happen again...'	Henderson (2003)
	Eliciting Sympathy	Assertions that problems are corrected	Ray (1999)
	Transparency	Asking stakeholders to feel sorry for the organization because of what happened	Greer & Moreland (2003), Kauffman (2001), Sellnow & Seeger (2001), Sellnow & Ulmer (1995), Williams & Olaniran (1998)
Excellence/Renewal	Volunteering	Emphasizing complete compliance, openness to inquiry, requesting information seeking	Gregory (2000)
	Dialogic	Seeking stakeholder involvement with the organization as a means of resolving the crisis	Das & Teng (1998), Milliman, et al. (1994), Nielson & Bartenuk (1996), Williams & Olaniran (1998)
Excellence/Renewal	Dialogic	Emphasizing openness and willingness to engage about the issue	Das & Teng (1998), Milliman, et al. (1994), Nielson & Bartenuk (1996), Williams & Olaniran (1998)

Table 3 Continued

Interorganizational Relationships	Exemplification	Portraying the organization as having integrity, social responsibility, moral worthiness	Benoit & Czerwinski (1997), Henriques & Sadorsky (1999), Marra (1998)
	Pro-social Behavior	Engaging in actions to atone for transgression and persuade stakeholders of positive identity	Mohamed, et al. (1999), Sellnow & Brand (2001)
	Blaring Others	Identifying negative link to undesirable other	Mohamed, et al. (1999)
	Blasting	Exaggerating negative features of an undesirable other	Mohamed, et al. (1999), Sellnow & Brand (2001)
	Burying	Obscuring or disclaiming a positive link to an undesirable other	Mohamed, et al. (1999)
	Blurring	Obscuring or disclaiming a negative link to a favorable other	Mohamed, et al. (1999)
	Belittling	Minimizing traits or accomplishments of a negatively linked other, attacking accuser's credibility	Benoit & Czerwinski (1997), Coombs & Schmidt (2000), Mohamed, et al. (1999)
	Boosting	Minimizing undesirable features of a positively linked other	Mohamed, et al. (1999)
	Boasting	Proclaiming a positive link to a desirable other	Mohamed et al., (1999)
	Burnishing	Enhancing desirable features of a positively linked other	Mohamed, et al. (1999)
	Collaboration	Emphasizing desire to change and work with another organization to resolve the crisis	Henriques & Sadorsky (1999), Martinelli & Briggs (1998), Milliman, et al. (1994)

Taken together, though these findings were strong, the formation of these strategies was a new contribution to our understanding of crisis response and must be tested to identify the degree to which they are valid. As such, we propose:

**Hypothesis 2:** Organizations facing transgressions will most typically employ tactics that reflect a defensive strategy (i.e., anti-social or defensive, accommodative, and framing the crisis tactics).

**Hypothesis 3:** Organizations facing organizational events will most typically employ tactics that reflect explanative and offensive strategies (i.e., framing the crisis, framing the organization, anti-social or defensive, excellence, and invoke interorganizational relationship tactics).

**Hypothesis 4:** Organizations facing events outside the organization's control will most typically employ tactics that reflect an aggressive strategy (i.e., framing the crisis, anti-social or defensive, and routine communication tactics).

### Nation

In recent years, there has been an increased recognition that national identity matters in crisis response. For example, Chen's (2009) analysis of the effects of institutionalizing public relations and strategic

identified different degrees to which public relations was institutionalized in Europe, the United States, and China as the *entrée* to the conversation. Further, Molleda, et al.'s (2005) analysis focusing on the expanding theories of global public relations based on the assumption that crises are not contained within a nation's borders, but have international implications could not have been more clearly demonstrated than the economic collapse based in issues within the American market. Additionally, even regional distinctions (i.e., Europe) have been problematized with research comparing the representation of key events of European debate identifying critical differences in the construction of narratives and symbolism between European nations (Rovisco, 2010). This suggests that we must look beyond analyses of single nations to understand crisis response in a global communication environment, which supports Marra's (1998) analysis that culture and crisis communication are inextricably linked from the decisions about what to communicate to the content of the messages communicated. Therefore, we propose:

**Hypothesis 5:** An organization's nation of origin will influence its approach to crisis response.

### **Channel**

In 2009, when information about the protests of the Iranian Presidential election reached the outside of that nation's borders, they were seen through the eyes of camera phones, social media, and blogs. The reality of a "Web 2.0" world is undeniable—Moore (2004) argues that the Internet and mediated forms of crisis communication represent a collaborative platform to manage both crises and their surrounding issues. Analysts argue that the Internet and other mediated forms of crisis communication are effective channels during crises because: (a) they are widely available; (b) they are easily updated, enabling timely responses; (c) the content is flexible so that the organization can communicate compassion to victims while helping the organization to communicate to the public as well as the media; and (d) they are inexpensive to maintain (Greer & Moreland, 2003).

Ultimately, a majority of organizations have turned to the Internet to communicate with stakeholders during a crisis (Perry et al., 2003). However, the same study also found that while the use of the Internet is increasing as a channel for crisis messages, organizations continued to prefer traditional methods of crisis communication. Part of this reason is because during disasters or very large organizational crises, organizations use the mass media to communicate with their stakeholders, suggesting that the media can be a target audience as well as a channel of communication that can enhance the credibility of an organization's crisis response strategy (Argenti, 2002; Benoit and Czerwinski, 1997; Henderson 2003). These findings suggest that there is a strong link between channel of communication crisis response strategy, but also suggest that there might be differences in the ways in which organizations engage new and traditional media in their crisis communication. Therefore, we propose:

**Hypothesis 6:** Organizational response strategies will differ between those messages sent via new and traditional media channels.

### **Timing Response Strategies**

In their work, Gonzales-Herrero and Pratt (1996) emphasize that it is not enough to examine critical situational factors; they argue it is also important to examine crisis lifecycles because in different stages of a crisis different communicative needs and strategies are likely to emerge. Further, Massey (2001) argues that research on crisis communication should be a longitudinal endeavor because crises are not static events also suggesting that communicative needs and strategies are likely to change over the course of a crisis.

Gonzales-Herrero and Pratt (1996) argue that during crises, communicative efforts are designed to handle the media, develop crisis materials (i.e., position statements, frequently asked question responses, preempt negative publicity, communicate with stakeholders). This suggests that the options and possible communicative choices during the crisis are almost limitless (Heath & Millar, 2004). However, they also argue that these messages will differ from those late in a crisis as organizations continue to monitor the issue, focus on corrective action, moving forward from the crisis, and rebuilding the organization's image. Essentially, late and post-crisis communication should demonstrate how the organization has changed, how it will prevent negative situations in the future, and how it has engaged the issue (Heath & Millar, 2004; Malone & Coombs, 2009). Though these recommendations are broad with some overlap, they do strongly suggest that over a crisis's life, there are likely to be differences in the messages communicating shifting from early accounts to post crisis image recovery. As such, we propose the following:

**Hypothesis 7:** Over time in a crisis, there will be changes in organizations' crisis response strategies.

### **Crisis Response Strategies**

Though we have been somewhat critical of single-organization case studies, this research has laid valuable groundwork for developing our understanding of crisis communication in the identification and discussion of more than 40 unique tactics (see Table 3). Additionally, this body of research contributes with comparisons of crisis response tactics used in single crises with single organizations; such as Benoit and Henson's (2009) analysis of President Bush's image repair discourse after Hurricane Katrina or Sellnow and Ulmer's (1995) analysis of message ambiguity in the Jack in the Box *E. Coli* crisis. In his work, Coombs (2007) asserts that no perfect list of crisis response strategies is perfect, but that his Situational Crisis Communication Theory demands a link between crisis situations and response strategies. Yet, in his conceptualization of response strategies he only addresses 11 tactics in two strategies that are argumentatively (versus directly tested)

derived. This suggests, that while a perfect list may not exist nor be possible, we can do much more to connect and evaluate strategies organizations use to respond to crises. Diers (2009) research made a very strong contribution in identifying eight strategies based on these individual tactics (see Table 2). However, these initial findings should be tested to identify the strength of those previous classifications of strategies as well as identify if any new strategies are likely to emerge. For these classifications to be valid, they cannot merely be useful descriptors at one point in time, they must translate across time and context. Therefore, we propose the following questions:

**Research Question 1:** To what extent are the eight strategies previously identified (Diers, 2009) verifiable in new data samples?

**Research Question 2:** Are there additional strategies that emerge based on new situational stressors?

### Methods

In the context of organizational crises and crisis response tactics, quantitative content analysis is a strong method to employ, particularly when selecting messages presented in both new and traditional public media outlets (Molleda, Connolly-Ahern, & Quinn, 2005). These media are also important because an organization's image is likely shaped through a combination of media sources, in particular when those events involve the combination of corporate profit, government interest, and/or public risk (Andsager & Smiley, 1998; Krishnamurthy & Kucuk, 2009; Malecha & Reagan, 2004).

Consequently, analyzing traditional and new media sources that includes crisis responses from the organization is a valuable and strategically grounded method for analyzing the proposed research questions and hypotheses (see, e.g., Andsager & Smiley, 1998; Molleda, et al., 2005). Therefore, the present study involves a 5 (industry) x 5 (nation) x 3 (crisis type) x 2 (channel) x time content analysis design.

### The Study Sample

Beginning in January, 2010 a research team of 14 identified organizational crises viable for this study based on the following criteria: (a) each crisis had to be judged as substantial enough to receive news coverage and organizational attention for the following eight weeks of data collection; (b) each had to be relevant at the time of data collection so that new media information would be readily available; and (c) at least two organizations from the same industry but different nations had to be identified. For the eight-week period from late January, 2010 into late March, 2010 the research team gathered data from any available new media sources the organization or its official representative(s) used (i.e., the organization's website, blog, Twitter feeds, Facebook, and YouTube videos). Additionally, the team used Lexis/Nexis™ to identify traditional media stories including official statements from the organization because effective precedent and

procedure for its use has been established in studies analyzing crisis communication (see Andsager & Smiley, 1998; Molleda, et al., 2005; Perry, Taylor, & Doerfel, 2003). Additionally, available advertisements addressing the crisis were used. The team's goal was to identify an exhaustive group of unique statements from official organizational representatives across new and traditional media sources. The result was eleven unique crises in five different industries from five different nations with 607 unique messages to analyze.

For organizational transgressions, the team focused on misdeeds with injuries including accusations against The Who's Peter Townshend for child pornography emerging before their Super Bowl performance and Toyota's series of recalls. For organizational events, economic downturns have dominated the news since 2008; therefore this study included, professional sports teams' financial struggles with Portsmouth Football Club's debt crisis and the WBNA's financial struggles; Canwest and Morris Publishing's financial struggles; and the automobile manufacturing industries financial struggles with Porsche and General Motors. Finally, for events outside the organization's control our study began the same week as the devastating Haiti earthquake; therefore, the independent humanitarian organizations with the British and American Red Cross's crisis response strategies were included.

### **Coding Scheme**

A unit of analysis was operationalized as a single news story (press release, Twitter post, unique Facebook post, etc.) because previous studies of crisis response messages (e.g., Benoit & Czerwinski, 1997; Elsbach, 1994; Greer & Moreland, 2003; Genderson, 2003; Kauffman, 2001) emphasize that when studying crisis communication, examining the interplay of tactics employed affords researchers more information about an organization's strategy.

Eleven team members—all of whom were unfamiliar with previous research—coded the entirety of one organization's crisis response messages. Each team member received a 50 minute group coding training with similar data using the coding scheme. Following procedures to establish intercoder reliability used by Molleda, et al. (2005), 10 percent of the sample was randomly selected and independently coded by another member of the research team. An overall intercoder reliability analysis was conducted finding the coding scheme to be reliable ( $\kappa = .89$ ). The coding scheme is based on manifest content, for each variable, with the operationalization reflected in Tables 1 and 3. Evidence of the presence of each crisis response tactic was coded as binary data with its presence or "not presence" noted.

### **Analysis Methods**

In order to address research questions one and two, a correlation was performed to identify relationships between crisis response tactics employed. Based on the results of this correlation, significant positive

correlations were analyzed as factors in order to test both differences in tactics and strategies to test the hypotheses. Because binary data can mathematically function as scale for Hypotheses one through six, ANOVA tests were run—first testing for interaction effects and where there were no interaction effects testing for main effects with a Scheffe post-hoc to identify homogeneous subsets. To test Hypothesis seven, a simple regression test and correlation analysis were performed, and to evaluate any interaction effects each level of each independent variable was selected and a simple regression analysis performed.

## Results

Overall, these data generally support previous crisis response strategy identifications, and identify industry, crisis type, nation, channel, and time as significantly influencing the selection of crisis response tactics and overall strategies. Additionally, time interacted with all four other variables in 37 unique interactions. As a result, while main effects for individual independent variables will be reported because the time interaction effects were not uniform, analysis at the individual variable-level for those interactions will be reported in the industry, crisis type, nation, and channel analyses.

## Crisis Response Strategies

Research Questions one and two asked to what extent were the eight previously identified (see Table 2) crisis response strategies verifiable in the new sample and if there were additional strategies emerging from these data. Simply stated, the answer to this question is a cautious yes. Three of the previously identified strategies emerged in this analysis (see Table 4). Specifically, a present-oriented strategy emerged, where the organizations tackled the crises directly talking about the organization and what was occurring in the organization with significant positive correlations between routine communication and framing the organization ( $r = .16$ ). An explanative strategy emerged with significant positive correlations between framing the crisis and framing the organization ( $r = .21$ ), accommodative ( $r = .17$ ), and excellence ( $r = .14$ ). Additionally a defensive strategy emerged with significant positive correlations between framing the organization and anti-social or defensive ( $r = .10$ ), accommodative ( $r = .08$ ), and interorganizational relationships ( $r = .11$ ). However, a new strategy also emerged from these data—a corrective strategy emphasizing an effort to improve the organization's image by invoking interorganizational relationships and showing the organization to be both excellent and responsive to the crisis. This was demonstrated by significant positive correlations between accommodative and excellence ( $r = .18$ ) as well as interorganizational relationships ( $r = .10$ ).



Table 4

**Correlations Between Crisis Response Tactics Employed in Crisis Communication Messages**

<i>Crisis Response Strategy<sup>1</sup></i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>
1. Self-Enhancement	-	-.05	-.25**	.03	-.23**	-.16**	.01	-.08
2. Routine Communication		-	.04	.16**	-.04	-.03	.02	-.05
3. Frame the Crisis			-	.21**	.03	.17**	.14**	.07
4. Frame the Organization				-	.1*	.08*	.08	.11**
5. Anti-social or Defensive					-	-.02	-.09*	.06
6. Accommodative						-	.18**	.1*
7. Excellence or Renewal							-	-.04
8. Interorganizational Relationships								-

<sup>1</sup>N = 607\* = significant at  $p = .05$  level (two-tailed)\*\* = significant at  $p = .01$  level (two-tailed)

In order to further evaluate both the strategies emerging as well as the effects of context on their use, a factor analysis was performed where factors were extracted using a principal components solution followed by a varimax and Kaiser Normalization rotation when multiple factors were observed. Items were included if the principle components analysis revealed a .6 or greater: present strategy Eigenvalue of 1.16 ( $\square\square$  .28); explanative strategy Eigenvalue of 1.46 ( $\square\square$  .40); defensive strategy Eigenvalue of 1.23 ( $\square\square$  .24); and corrective strategy of 1.19 ( $\square\square$  .15). The factor analysis supported the correlation identification of strategies and though the Chronbeck's alpha scores are low, the most likely impact in their application to the independent variables will be that significant differences are more difficult to find.

**Industry**

These data show that Hypothesis one was supported. There were significant main effects for industry for seven of the eight tactic categories (see Table 3) including: self-enhancement  $F(4, 607) = 4.56$ ;  $p = .00$ ; routine communication  $F(4, 607) = 4.47$ ;  $p = .00$ ; framing the crisis  $F(4, 607) = 23.33$ ;  $p = .00$ ; framing the organization  $F(4, 607) = 8.36$ ;  $p = .00$ ; anti-social or defensive  $F(4, 606) = 12.91$ ;  $p = .00$ ; accommodative  $F(4, 607) = 18.56$ ;  $p = .00$ ; and excellence  $F(4, 607) = 9.11$ ;  $p = .00$ . Additionally main effects were found for all four strategies identified above including: present  $F(4, 607) = 8.01$ ;  $p = .00$ ;

explanative  $F(4, 607) = 10.31$ ;  $p = .00$ ; defensive  $F(4, 607) = 10.54$ ;  $p = .00$ ; and corrective  $F(4, 607) = 9.37$ ;  $p = .00$ .

Further, 16 interaction effects were observed between industry and time. In the automobile industry, time affected the use of the accommodative tactic  $t(149) = 2.23$ ;  $p = .03$  ( $r = -.18$ ; adjusted  $R^2 = .03$ ) and the corrective strategy  $t(149) = 1.19$ ;  $p = .05$  ( $r = -.16$ ; adjusted  $R^2 = .02$ ). In the publishing industry, time affected the use of framing the organization  $t(54) = -1.96$ ;  $p = .05$  ( $r = -.16$ ; adjusted  $R^2 = .05$ ), anti-social or defensive  $t(54) = -2.06$ ;  $p = .05$  ( $r = .27$ ; adjusted  $R^2 = .06$ ), present strategies  $t(54) = -2.13$ ;  $p = .04$  ( $r = .28$ ; adjusted  $R^2 = .06$ ), defensive strategies  $t(54) = -3.40$ ;  $p = .00$  ( $r = .42$ ; adjusted  $R^2 = .16$ ), and corrective strategies  $t(54) = -2.09$ ;  $p = .04$  ( $r = .28$ ; adjusted  $R^2 = .06$ ). In the professional sports industry, time affected the use of framing the crisis  $t(275) = 2.26$ ;  $p = .03$  ( $r = -.14$ ; adjusted  $R^2 = .02$ ), framing the organization  $t(275) = 2.21$ ;  $p = .03$  ( $r = -.14$ ; adjusted  $R^2 = .01$ ), anti-social or defensive  $t(275) = 3.33$ ;  $p = .00$  ( $r = -.20$ ; adjusted  $R^2 = .04$ ), invoking IORs  $t(275) = 1.97$ ;  $p = .05$  ( $r = -.12$ ; adjusted  $R^2 = .01$ ), explanative strategies  $t(275) = 2.69$ ;  $p = .01$  ( $r = -.16$ ; adjusted  $R^2 = .02$ ), and defensive strategies  $t(275) = 3.07$ ;  $p = .00$  ( $r = -.18$ ; adjusted  $R^2 = .03$ ). Among humanitarian aid organizations, time affected framing the crisis  $t(106) = -2.69$ ;  $p = .01$  ( $r = .25$ ; adjusted  $R^2 = .06$ ), excellence  $t(106) = -3.43$ ;  $p = .00$  ( $r = .32$ ; adjusted  $R^2 = .09$ ), explanative strategies  $t(106) = -2.07$ ;  $p = .04$  ( $r = .20$ ; adjusted  $R^2 = .03$ ), and corrective strategies  $t(106) = -1.92$ ;  $p = .05$  ( $r = .18$ ; adjusted  $R^2 = .03$ ). Additionally, the Scheffe post hoc analysis revealed significant differences between groups (see Table 5).

Table 5

**Scheffe Post Hoc Findings for Industry**

<i>CRS Tactic/ Strategy</i>	<i>Primary Category I</i>	<i>Primary Category J</i>	<i>M Diff (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>
Tactic: Self-Enhancement	Publishing	Professional Sports	-.26	.07	.01
Tactic: Frame the Crisis	Automobile	Publishing	-.39	.07	.00
		Humanitarian Aid	-.3	.06	.00
	Publishing	Professional Sports	.39	.07	.00
		Entertainment	.42	.12	.00
	Professional Sports	Humanitarian Aid	.38	.05	.00
	Humanitarian Aid	Entertainment	.33	.11	.05
Tactic: Frame Organization	Automobile	Humanitarian Aid	-.19	.06	.02
	Professional Sports	Humanitarian Aid	-.27	.05	.00
		Entertainment	-.33	.10	.04
Tactic: Anti-Social Defensive	Automobile	Professional Sports	.12	.03	.02
	Professional Sports	Humanitarian Aid	-.12	.04	.04

	Entertainment	Automobile	.38	.08	.00
		Publishing	.37	.09	.00
		Professional Sports	.49	.08	.00
		Humanitarian Aid	.37	.08	.00
Tactic: Accommodative	Automobile	Publishing	.29	.06	.00
		Professional Sports	.29	.04	.00
		Entertainment	.27	.09	.05
	Professional Sports	Humanitarian Aid	-.18	.04	.00
Tactic: Excellence	Automobile	Publishing	.20	.06	.04
	Humanitarian Aid	Automobile	.17	.05	.02
		Publishing	.37	.07	.00
		Professional Sports	.21	.05	.00
Strategy: Present	Professional Sports	Humanitarian Aid	-.21	.04	.00
Strategy: Explanative	Professional Sports	Automobile	-.14	.03	.00
		Humanitarian Aid	-.18	.03	.00
Strategy: Defensive	Automobile	Publishing	.12	.04	.05
	Professional Sports	Automobile	-.15	.03	.00
		Humanitarian Aid	-.11	.03	.00
		Entertainment	-.08	.06	.05
Strategy: Corrective	Automobile	Publishing	.23	.05	.00
		Professional Sports	.15	.03	.00
	Publishing	Humanitarian Aid	-.17	.05	.02

### Crisis Type

These data demonstrate that crisis type is a significant predictor of crisis response tactics and strategies. Main effects were found for six of the eight tactic categories (see Table 3) including: framing the crisis  $F(2, 607) = 21.29$ ;  $p = .00$ ; framing the organization  $F(2, 607) = 11.07$ ;  $p = .00$ ; anti-social or defensive  $F(2, 606) = 5.80$ ;  $p = .00$ ; accommodative  $F(2, 607) = 39.24$ ;  $p = .00$ ; excellence  $F(2, 607) = 22.37$ ;  $p = .00$ ; and emphasizing IORs  $F(2, 606) = 3.89$ ;  $p = .02$ . Additionally main effects were found for all four strategies identified above including: present  $F(2, 607) = 10.00$ ;  $p = .00$ ; explanative  $F(2, 607) = 20.39$ ;  $p = .00$ ; defensive  $F(2, 607) = 17.54$ ;  $p = .00$ ; and corrective  $F(2, 607) = 25.44$ ;  $p = .00$ . Significant interaction effects with time and Scheffe post hoc differences are be used to analyze the hypotheses.

**Hypothesis one: organizational transgressions.** This hypothesis predicted that organizational transgressions will most typically employ tactics that reflect a defensive strategy (i.e., anti-social or defensive, accommodative, and framing the crisis). These data directly support this hypothesis. Specifically, the Scheffe post hoc results indicated (see Table 6) that organizations facing transgressions were most likely to use a defensive strategy, anti-social or defensive and accommodative tactics, and second most

likely to use framing the crisis as a tactic. Further, organizations facing transgressions are most likely to employ accommodative tactics ( $M = 1.49$ ,  $SD = .50$ ) than any other single tactic. However, these data also suggested organizations facing transgressions were most likely to use both explanative and corrective strategies as well. Additionally, these data indicate that two relationships change with time. Time affected the use of accommodative tactics  $t(75) = 2.41$ ;  $p = .02$  ( $r = -.27$ ; adjusted  $R^2 = .06$ ) and present strategies  $t(75) = -2.00$ ;  $p = .05$  ( $r = .23$ ; adjusted  $R^2 = .04$ ).

**Hypothesis two: organizational events.** This hypothesis predicted that organizational events—in these data's case economic downturns—would most typically employ tactics reflecting an explanative and offensive strategy (i.e., combining framing the crisis, framing the organization, anti-social or defensive, excellence, and IORs). These data partially reject this hypothesis (see Table 6). In the case of economic downturns, the low means for framing the organization ( $M = 1.26$ ,  $SD = .44$ ), anti-social or defensive ( $M = 1.11$ ,  $SD = .31$ ), accommodative ( $M = 1.10$ ,  $SD = .31$ ), excellence ( $M = 1.14$ ,  $SD = .35$ ), and employing IORs ( $M = 1.17$ ,  $SD = .37$ ) indicate these tactics were not commonly used during economic downturns ( $N = 425$ ). Additionally, the means indicate only present ( $M = 1.28$ ,  $SD = .34$ ) were substantially used. However, because time substantially influenced two tactics—self enhancement  $t(424) = -2.80$ ;  $p = .01$  ( $r = .14$ ; adjusted  $R^2 = .02$ ) and framing the crisis  $t(424) = 5.80$ ;  $p = .00$  ( $r = -.27$ ; adjusted  $R^2 = .07$ ) as well as the corrective strategy  $t(424) = -2.24$ ;  $p = .03$  ( $r = .11$ ; adjusted  $R^2 = .01$ ) it suggests that the adaptations that organizations reacting to economic downturns partially supports the previous research with framing the crisis beginning being more substantially used and corrective strategies being implemented over time.

Table 6

**Scheffe Post Hoc Findings for Crisis Type**

<i>CRS Tactic/ Strategy</i>	<i>Primary Category I</i>	<i>Primary Category J</i>	<i>M Diff (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>
Tactic: Frame the Crisis	EOO <sup>1</sup>	OT <sup>2</sup>	.20	.07	.02
		OE <sup>3</sup>	.32	.05	.00
Tactic: Frame Organization	EOO	OT	.20	.07	.02
		OE	.23	.05	.00
Tactic: Anti- Social Defensive	OT	OE	.13	.04	.01
Tactic: Accommodative	OT	OE	.38	.04	.00
	EOO	OT	-.24	.05	.00
		OE	.15	.04	.00
Tactic: Excellence	OE	OT	-.21	.05	.00

		EOO	-.25	.05	.00
Tactic: IORs	OT	EOO	.28	.10	.02
Strategy: Present	OE	EOO	-.17	.04	.00
Strategy: Explanative	OE	OT	-.18	.04	.00
		EOO	-.15	.03	.00
Strategy: Defensive	OT	EOO	.09	.04	.05
	OE	OT	-.18	.03	.00
		EOO	-.08	.03	.01
Strategy: Corrective	OT	EOO	.16	.04	.00
	OE	OT	-.25	.04	.00
		EOO	-.10	.03	.01

<sup>1</sup>Event Outside Organization's Control

<sup>2</sup>Organizational Transgression

<sup>3</sup>Organizational Event

**Hypothesis three: events outside the organization's control.** This hypothesis posited that organizations facing these crises will most typically employ tactics that reflect an aggressive strategy (i.e., anti-social, framing the crisis, and routine communication). In the case of humanitarian aid organizations responding to the earthquake in Haiti in 2010, this hypothesis is largely rejected. These data indicated that humanitarian aid organizations responding to events outside the organization's control (see Table 6) are the most likely of the three types of crises to use tactics that frame the crisis ( $M = 1.58$ ,  $SD = .50$ ), frame the organization ( $M = 1.49$ ,  $SD = .50$ ), and communicate excellence ( $M = 1.39$ ,  $SD = .49$ ). Additionally, they are most likely to use a present-oriented strategy ( $M = 1.45$ ,  $SD = .39$ ) and likely to use an explanative strategy ( $M = 1.34$ ,  $SD = .23$ ). Further, time also affects two tactics—framing the crisis  $t(106) = -2.70$ ;  $p = .01$  ( $r = .25$ ; adjusted  $R^2 = .06$ ) and excellence  $t(106) = -3.43$ ;  $p = .00$  ( $r = .32$ ; adjusted  $R^2 = .09$ ), as well as two strategies—explanative  $t(106) = -2.07$ ;  $p = .04$  ( $r = .20$ ; adjusted  $R^2 = .03$ ) and corrective  $t(106) = -2.00$ ;  $p = .05$  ( $r = .18$ ; adjusted  $R^2 = .03$ ). Together these data indicate that organizations responding to events outside the organization's control do not respond as predicted.

## Nation

These data suggest that the national origin of the organization in crisis is a significant factor affecting organizational responses to crises. There was a significant interaction between nation and channel  $F(9, 608) = 4.38$ ;  $p = .05$  for present strategies. These data suggest that Germany ( $M = 1.55$ ,  $SD = .39$ ) used present strategies more than any other nation<sup>1</sup>; however, in the case of comparing nation and channel, all

<sup>1</sup> US  $M = 1.30$ ,  $SD = .36$ ; UK  $M = 1.26$ ,  $SD = .31$ ; Canada  $M = 1.33$ ,  $SD = .34$ ; Japan  $M = 1.33$ ,  $SD = .37$

nations except Canada used the present strategy more often in new media compared to traditional media environments.

There were significant main effects for seven tactics including: self-enhancement  $F(4, 607) = 22.77$ ;  $p = .00$ , routine communication  $F(4, 607) = 9.00$ ;  $p = .00$ , framing the crisis  $F(4, 607) = 15.66$ ;  $p = .00$ , anti-social or defensive  $F(4, 606) = 18.29$ ;  $p = .00$ , excellence  $F(4, 607) = 4.58$ ;  $p = .00$ , and invoking IORs  $F(4, 607) = 4.05$ ;  $p = .00$ . Additionally, there were significant main effects for the remaining three strategies—explanative  $F(4, 607) = 18.90$ ;  $p = .00$ , defensive  $F(4, 607) = 19.99$ ;  $p = .00$ , and corrective  $F(4, 607) = 15.87$ ;  $p = .00$ .

Further, eight interaction effects between the nation and time were observed with five of them being from US-based organizations. Changes in the US crisis response with time included three tactics—self-enhancement  $t(350) = -3.39$ ;  $p = .00$  ( $r = .18$ ; adjusted  $R^2 = .03$ ), framing the crisis  $t(350) = 6.45$ ;  $p = .00$  ( $r = -.33$ ; adjusted  $R^2 = .10$ ), and excellence  $t(-2.09)$ ;  $p = .04$  ( $r = .11$ ; adjusted  $R^2 = .01$ ). Neither the UK nor Canada demonstrated significant interaction effects. There were two tactics changes in Germany's crisis response including self-enhancement  $t(44) = 1.99$ ;  $p = .05$  ( $r = -.29$ ; adjusted  $R^2 = .06$ ) and excellence  $t(44) = 2.06$ ;  $p = .05$  ( $r = -.30$ ; adjusted  $R^2 = .07$ ). Additionally, there was only one change in Japanese crisis response—accommodative tactics reduced over time  $t(62) = 2.89$ ;  $p = .01$  ( $r = -.35$ ; adjusted  $R^2 = .11$ ).

Additionally, Scheffe post hoc tests reveal significant differences between individual nations (see Table 7). Specifically, the US differed from three of the four other nations substantially—only the US and Canada had no significant differences in their tactics or strategies. The US differed from the UK on four tactics and two strategies. The US used self-enhancement tactics more often than the UK; however, the UK used framing the crisis, anti-social or defensive and accommodative tactics all more often as well as employing explanative and defensive strategies more often. Germany used routine communication and anti-social or defensive tactics as well as explanative and defensive strategies more often than the US. Finally, the US and Japan differed substantially with Japan using three tactics and three strategies significantly more often than the US including: framing the crisis, accommodative, and invoking interorganizational relationships as well as explanative, defensive, and corrective strategies.

Table 7

**Scheffe Post Hoc Findings for Nation**

<i>Tactic/ Strategy</i>	<i>Primary Category I</i>	<i>Primary Category J</i>	<i>M Diff (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>
Tactic: Self-Enhancement	UK	US	-.44	.05	.00
		Germany	-.42	.08	.00
		Japan	-.33	.07	.00
Tactic: Routine Communication	Germany	US	.34	.07	.00
		UK	.47	.08	.00
		Canada	.39	.13	.05
		Japan	.29	.09	.04
Tactic: Frame the Crisis	US	UK	-.35	.05	.00
		Japan	-.19	.06	.04
Tactic: Anti-Social Defensive	US	UK	-.26	.03	.00
Tactic: Accommodative	Japan	Germany	-.22	.05	.00
		US	.5	.04	.00
		UK	.29	.05	.00
		Canada	.41	.09	.00
		Germany	.46	.07	.00
Tactic: Excellence	Japan	UK	.22	.06	.02
		Canada	.37	.11	.02
Tactic: Emphasizing IORs	Japan	US	.32	.09	.02
Strategy: Explanative	US	UK	-.18	.03	.00
		Germany	-.14	.04	.04
		Japan	-.25	.04	.00
Strategy: Defensive	US	UK	-.16	.03	.00
		Germany	-.16	.04	.00
		Japan	-.24	.03	.00
Strategy: Corrective	Japan	US	.31	.04	.00
		UK	.23	.04	.00
		Canada	.30	.08	.01
		Germany	.24	.06	.00

The UK and Canada differed on no tactics or strategies. However, the UK used substantially fewer self-enhancement and routine communication tactics than Germany. Additionally, Japan used more self-enhancement, accommodative, and excellence tactics and were more likely to use a corrective strategy than the UK. In addition to those already mentioned, Germany used routine communication tactics more often than Japan, but Japan was more likely to use accommodative tactics and corrective strategies more

often. Therefore, these data strongly support hypothesis five that the organizations nation of origin will affect its approach to crisis response.

### Channel

These data suggest that channel does affect crisis response strategy, but only in approximately half of the tactics and strategies indicating strong partial support for hypothesis six. Specifically, these data indicate main effects for channel on three tactics and two strategies including: anti-social or defensive  $F(1, 608) = 11.46$ ;  $p = .00$ , accommodative  $F(1, 608) = 15.02$ ;  $p = .00$ , excellence  $F(1, 608) = 5.23$ ;  $p = .02$  tactics as well as the explanative  $F(1, 608) = 5.20$ ;  $p = .02$  and defensive  $F(1, 608) = 10.20$ ;  $p = .00$  strategies. This is, of course, in addition to the previously discussed interaction between channel and nation for the present strategy. These data indicate that organizations use traditional media for more assertive messages with substantially more instances of anti-social or defensive (traditional  $M = 1.22$ ,  $SD = .42$ ; new media  $M = 1.11$ ,  $SD = .31$ ) and accommodative (traditional  $M = 1.29$ ,  $SD = .46$ ; new media  $M = 1.15$ ,  $SD = .35$ ) tactics as well as explanative (traditional  $M = 1.30$ ,  $SD = .41$ ; new media  $M = 1.23$ ,  $SD = .25$ ) and defensive (traditional  $M = 1.26$ ,  $SD = .39$ ; new media  $M = 1.18$ ,  $SD = .21$ ) strategies. Yet, organizations used the new media channels to most typically communicate about the excellence of the organization and its work (new media  $M = 1.24$ ,  $SD = .43$ ; traditional  $M = 1.11$ ,  $SD = .32$ ).

Additionally, there were three interaction effects between channel and time. In traditional media sources, framing the crisis reduced over time  $t(134) = 2.92$ ;  $p = .00$  ( $r = -.25$ ; adjusted  $R^2 = .05$ ). In new media sources two additional tactics changed with time—self-enhancement  $t(472) = -2.22$ ;  $p = .03$  ( $r = .10$ ; adjusted  $R^2 = .01$ ) and framing the crisis  $t(472) = 3.60$ ;  $p = .00$  ( $r = -.16$ ; adjusted  $R^2 = .03$ ). Therefore, while channel does not make as large of an impact as other variables, it is still a substantial factor offering a strong partial confirmation of hypothesis 6.

### Time

Hypothesis seven predicted that over the time of a crisis, crisis response strategies would be likely to evolve and change. As previous results indicate, this hypothesis is supported; however, the relatively small effect sizes indicate that future research should work to identify additional co-variates. In addition to the interaction effects, these data indicate that time affects three tactics and one strategy as main effects. This hypothesis was tested with a series of simple regressions indicating that the tactics of self-enhancement  $t(606) = -2.65$ ;  $p = .00$ , adj.  $R^2 = .01$ , framing the crisis  $t(606) = 4.72$ ;  $p = .00$ , adj.  $R^2 = .03$ , and excellence  $t(606) = -2.03$ ;  $p = .00$ , adj.  $R^2 = .01$  as well as the corrective strategy  $t(606) = -2.06$ ;  $p = .00$ , adj.  $R^2 = .01$  were affected by time. These resulted in positive correlations with self-



enhancement ( $r = .11$ ) and excellence ( $r = .08$ ) tactics as well as the corrective strategy ( $r = .08$ ); however, a negative correlation with the framing the crisis tactic ( $r = -.19$ ) suggesting that organizations are more likely to use self-enhancement and excellence tactics along with the corrective strategy as the crisis progresses, but less likely to frame the crisis with time.

## Discussion

This research has somewhat problematized but also clarified previous findings, but more importantly identified some of the most productive paths forward to building a more robust understanding of crisis response. This research highlights two of the key lessons learned in crisis communication from Hurricane Katrina: (a) because relationships between organizations and their stakeholders are not static, we can expect both new threats and new opportunities and (b) we must view organizations and the environment integratively—the more we try to analyze real-world situations, the more we will understand them (Cowen & Cowen, 2010). Yet, the consistencies between Diers (2009) and the present research suggests that useful “lists” of crisis response strategies applying across contexts can emerge and we should continue to develop, test, revise, and analyze evidence-based lists—preferring them to analytical lists. Therefore, this section will summarize key findings and contributions as well as identify limitations and directions for future research based on: time, industry, crisis type, nations, channels, and crisis response strategies.

## Time

We begin with time because this factor that most affected the results of this study reaching its influence across all other factors. Additionally, this method of addressing time within the context of on-going crises is also a departure from the way in which time is often depicted in crisis communication research. Typical conceptualizations of time focus on pre-crisis (e.g., prevention), an communication intervention during a crisis, post-crisis clean up (e.g., assigning blame), and image recovery (Malone & Coombs, 2009). The strength of these findings across an 8-week study of crises suggests that while there is some truth in the association of image recovery with later in crises, these categorical descriptions of the effect of time on crisis response strategies are likely too reductionist. Yet, the relatively small effect sizes for time suggest that future research ought to also identify the factors that, together with time, most influence organizational crisis response.

Overall, there were several trends in the influence of time on crisis responses—that while positive or image-recovery types of tactics and strategies developed over time (i.e., self-enhancement, excellence, and corrective were predominantly positively correlated with time), so too did others like present-oriented and defensive strategies. What was, however, consistent was that response strategies over time became more

rich and complex with many of the strategies emerging as significant as crises developed. These findings are more in line with practitioner recommendations and analysis about the need for early rapid responses—giving facts and setting a clear tone about the organization (e.g., framing the crisis and accommodative tactics both were used more early rather than late) and then developing that information as the crisis continues (Carr, 2010; Neary, 2010) than many academics' analysis about the phases of crisis development (e.g., Gonzales-Herrero & Pratt, 1996; Malone & Coombs, 2009). Additionally, time interacted with industry and crisis the most—approximately 25 percent of the time compared to nation and channel—interacting approximately 13 percent of the time.

One of the limitations in this study was that some of the crises had just begun, some had been on-going, and some (e.g., those in the entertainment industry) were simply too short. This suggests that while future research ought to include time as—at the very least—a covariate if not the object of study, it should probably be tested in a more consistent sample in the future.

### **Industry**

Overall, industry was identified as a more substantial factor in this study than previous ones supporting more general analysis that industries would influence crisis response strategies (e.g., Arpan, 2002; deBrooks & Waymer, 2009; Glynn, 2000; Millar, 2004). Across four of the industries analyzed there were strong findings, yet more research should be developed on each and expand this research to address other industries.

The automobile (manufacturing) industry has seen serious challenges in the last several years ranging from the economic downturn to a seemingly unending set of substantial recalls. The manufacturers included in this study included both primary crisis situations and the findings were consistent with previous manufacturing findings (Diers, 2009) with the use of the defensive strategy. However, the automobile industry employed a rich set of strategies with evidence of all four strategies strongly emerging. There are two ways to understand these findings—the first supports Cowen and Cowen's (2010) lessons learned after Hurricane Katrina that organizations are embedded in multiple communities and those relationships (as well as the communication needed to maintain or repair them) should be viewed as integrated—in short, we should expect a rich number of strategies and tactics from the industry. The alternative explanation is that automobile manufacturers are similar to nine of ten organizations facing economic downturns—they fail to strategically plan (Anonymous, 2010) and so use a kitchen sink approach to responding to crises. At this point, it is not clear which might be the case; however, this is certainly an area for future research.

Similarly, the publishing industry has been hard-hit by the economic downturn and the simultaneous proliferation of new media, and in this case it seems more clear that they are a part of that 90 percent of

organizations that have failed to strategically plan for the economic downturn (Anonymous, 2010). This is evident because as the situations we analyzed developed, the publishers continued to develop their responses implementing present, defensive, and corrective responses as time progressed. PR practitioner Patrick Kinney argued (Neary, 2010) that while the first moments of a crisis are critical, if those first responses to a crisis are not effective, we should see evidence of substantial strategy development over time. This certainly seems to be the case in the publishing industry.

Humanitarian aid organizations—like the other two developed their message complexity with time. Early in the crisis, these organizations emphasized present and defensive strategies, which make sense as they are trying to educate stakeholders about the situation, develop donations and support, and minimize any negative information that might come out about aid or relief efforts. Later in the crisis, these organizations developed explanative and corrective strategies seemingly to paint their work in the crisis as open, engaged, and celebrating their successes. This strategic development supports previous research indicating that because of the challenging nature of natural disasters, nonprofit organizations often have to improvise their messages (Broz, et al., 2009).

Finally, the professional sports organizations that we examined were unique—in comparison to the other industries. While the other industries broadened their responses during the crisis, professional sports narrowed theirs. These organizations began with defensive and explanative strategies emphasizing tactics that framed the crisis, framed the organization, were anti-social or defensive, and invoked interorganizational relationships and then narrowed to essentially a single-tactic strategy at the end using self-enhancement nearly exclusively. Their use of self-enhancement did not change with time; it merely was the one remaining over the data-collection period. These were sports organizations in different sports, different sex players, different countries, and even different relative “status” of the sports (English Premier League Soccer versus the Women’s National Basketball Association). There is not a clear reason evident in this analysis and there is a dearth of research on sports organizations and crisis communication to explain this difference from the other industries. Certainly, more research needs to be conducted analyzing crisis response in the sports industry.

### **Crisis Type**

This study’s investigation of crisis type yielded significant differences between transgressions, events or economic downturns, and events outside the organizations control or natural disasters. These data did not entirely behave as predicted; yet, we believe there are good explanations for these disparate findings. Initially, organizational transgressions behaved as predicted—in fact, these data more accurately reflected previous research (e.g., Coombs & Holladay, 2002; Hearit, 1999; Pearson & Clair, 1998) than did Diers

(2009) research with clear evidence of not only defensive strategies, but also image-oriented strategies. This suggests that crises are probably best studied over time—something the cross-sectional design with a random sampling of “early”, “middle”, and “late” of Diers (2009) did not accomplish—indicating that a longitudinal and cross-sectional design is probably the best design.

The findings for Organizational Events were most interesting because all of the organizations (N = 7 of 11) were experiencing economic downturns. These organizations crossed national and industry lines making the findings likely to be robust. For these organizations facing economic downturns, the principle strategy implemented was present-oriented with an emphasis on framing the organization and routine communication (e.g., basic marketing, annual reports, newsletters, etc.). This strategy represents an almost “business as usual” or “Wait, what crisis?” approach for organizations facing serious financial troubles like the Portsmouth FC that had weeks of not paying its players and being hundreds of millions of dollars in debt with a risk of being disbanded, or General Motors having gone through a bankruptcy and restructuring with the US Federal Government as its majority stockholder, or the publishing industry, which is at critical risk of failing altogether. Aside from being a seemingly ‘tone-deaf’ economic decline strategy strongly supports the findings from the survey indicating that most organizations facing economic decline have failed to strategically prepare for the situation (Anonymous, 2000). However, there is a positive side—the development of the corrective strategy in these situations over time suggests these organizations are trying to adapt. The question for future research will be whether these later adaptations renew the organizations and lead to positive outcomes for organizations struggling since the 2008 global “financial crisis”.

Finally, the two organizations followed to analyze the Events Outside the Organization’s Control were also unlike most organizations facing these kinds of events because they were humanitarian aid organizations responding to the earthquake that devastated Haiti in January, 2010. Unlike, for example, the airline industry affected by the terrorist attacks of September 11, 2001 in the United States or even the 2010 Iceland volcanic eruptions, the humanitarian aid organizations’ “business” increases with the unforeseen events and their performance in responding to them is the source of their public image. Therefore, it makes sense that present and defensive strategies are used early to address the crisis and set themselves up as positively as possible with the corrective and explanative strategies coming later to celebrate successes.

Superficially, it seems as though these data have problematized previous research on the influence of crisis type on crisis response strategies; however, these data more clearly demonstrate that when dealing with “average” or more typical types of crises that previous research effectively predicted these crises responses. However, we are confronting a different world and different types of crises and our research must adapt to them.

## **Nation**

Though research in the last couple of years has emphasized the importance of studying crisis communication across cultures and national boundaries (Bodkin, Amato, & Peters, 2009; Carroll, 2009; Chen, 2009 710; de Brooks & Waymer, 2009), there has been little genuinely cross-national scholarship in crisis communication. Additionally, much of the theory building in crisis communication has been based in American case studies (Argenti, 2002; William L. Benoit & Czerwinski; Coombs, 2007; Coombs & Schmidt, 2000 611; Fishman, 1999 435; Heath & Millar, 2004 661; Pearson & Clair, 1998; Sellnow & Brand, 2001; Ulmer & Sellnow, 2000). These data strongly suggest that our focus on American organizations and single-nation case studies should change.

Findings of note included, first, that US-based organizations most changed their tactics and strategies with time reducing the application of framing the crisis and adding self-enhancing and excellence tactics with defensive and corrective strategies. The only other nation-based changes were negative representing a reduction of tactics with German and Japanese-based companies removing tactics. Overall, these data indicated that the US differed from most nations in the tactics and strategies used.

Second, the German-owned company analyzed—Porsche—was dominated by a present-oriented strategy, so much that unlike the other automobile manufacturers over the course of the crisis it nearly eliminated its use of image-based tactics. Third, the Japanese company analyzed—Toyota—was dominated by pro-social tactics and strategies focusing on accommodation (though that decreased with time), self-enhancement, excellence, and corrective strategies. This is not surprising given that the crisis was the Toyota recalls; however, it too deviated from the automobile industry profile. In both of these cases, it would be easy to argue that nation was not a primary influence—that situation or industry would dictate the responses. However, these two organizations were obviously within the same industry and yet varied from each other substantially and Toyota's focus on pro-social tactics and strategies also ran counter to the defensive strategy, which was the dominant one for organizational transgressions. This, plus the lack of interactions between these variables suggests that a culture-based explanation more appropriately reflects these findings, which is consistent with Chen's (2009) analysis of public relations across regions and Rovisco's (2010) findings on different nations' narratives and symbols surrounding events.

Taken together, these findings suggest US is not the 'box standard' for crisis response and theory building. However, this research is only a first examination of cross-national crisis response strategies and future research should not just do more single-nation case studies—instead we should increase the number of comparisons in order to verify these findings and other single-nation findings as well as challenge common assumptions about how crisis communication works.

### **Channels**

Whereas the other variables saw substantial findings, channels was the weakest of the independent variables suggesting that crisis communication and public relations is able to translate its core messages, no matter the medium. However, there are some findings of note. Initially, over time, we found that in both traditional and new media the use of framing the crisis reduced suggesting this strategic consistency we mentioned; however, we saw an increase in the use of self-enhancement in new media only over time. More interestingly, where there were differences between traditional and new media, we only saw positive or pro-social messages being communicated in new media with a focus on self-enhancement with time and excellence tactics. However, in traditional media outlets, there was a mixture of message strategies pairing explanative and defensive tactics. This suggests that media framing may have much to do with these differences. Using new media (e.g., press releases, blogging, twitter, etc.), organizations have absolute control of their message. However, in traditional media, organizations rely on journalists for the selection of statements disseminated. Future research should definitely address framing biases in crisis responses to better analyze this finding.

### **Conclusion**

In the end, did the previous heuristics stand up against new crises, a longitudinal design, and new types of organizations? We argue a cautious yes—though we revised and added to previous findings (see Table 8) with this research, the content categories remained intact. Additionally, the content categories (i.e., strategies) identified here reflected correlations between tactics coded by neutral researchers indicating that we can, in fact, effectively begin to make lists of strategies born from research-based analysis of the tactics. Additionally, by replicating and broadening Diers (2009) research, we confirmed three new factors' impact on crisis response messages and concretely identified an image-based strategy that she previously suggested a trend towards seeing, but simply did not have the data to support.

Table 8

## Revision to Crisis Response Message Strategies

Strategy	Definition	Tactics Included	Predictors of Strategy
Present-Oriented	CRSs emphasize tackling the crisis directly—talking about the organization's role and/or actions taken	Framing the Crisis, <b><i>Framing the Organization</i></b> <sup>1,2</sup> , Anti-Social/Defensive, Accommodative, IOR's, <i>Routine Communication</i>	Non-Crisis Prone Organizations, <i>Publishing Industry (later in crisis), Automobile, Humanitarian Aid, Entertainment, OT</i> <sup>3</sup> (later in crisis), <i>EOO, OE, US, UK, Canada, Germany, Japan, Traditional Media, New Media</i>
Defensive	CRSs emphasize denying or minimizing the organization's culpability or role, but also actively involves efforts to increase organization's image	<b><i>Anti-Social/Defensive, Accommodative, Framing the Organization, IORs</i></b>	Manufacturing Industry, Administrative Support & Waste Remediation Industry, <i>Publishing (later in crisis), Professional Sports (early in crisis), Automobile, Humanitarian Aid, Entertainment, OT, EOO, US (later in crisis), US, UK, Canada, Germany, Japan, Traditional Media</i>
Explanative	CRSs endeavor to create good will while explaining the crisis—characterized by openness, engagement, and an appearance that the organization is sympathetic to the situation	<b><i>Framing the Crisis, Accommodative, Framing the Organization, Excellence</i></b>	Accommodation Industry, Finance/Insurance, <i>Professional Sports (early in crisis), Humanitarian (late in crisis) Automobile, Publishing, Entertainment, OE, OT, EOO (later in crisis), UK, Canada, Germany, Japan, Traditional, New Media</i>
Corrective	CRSs endeavor to emphasize the work the organization is doing to address the crisis—characterized by appeals to a positive organizational image, even borrowing from partner organizations' image	<i>Accommodative, Excellence, IORs</i>	<i>Automobile (early in crisis), Publishing (late in crisis), Humanitarian Aid (late in crisis), OT, OE (later in crisis) EOO (later in crisis), US (later in crisis), UK, Germany, Japan, Traditional Media</i>

<sup>1</sup>Tactics and Factors found in this study are italicized

<sup>2</sup>Tactics and Factors found in Diers (2009) and this study italicized and bolded

<sup>3</sup>OT = Organizational Transgression, OE = Organizational Event, EOO = Event Outside the Organization's Control

Yet, more than anything else, this study demonstrates that verifiable and testable strategies will emerge from samples if we engage in the research to identify them and that those strategies are substantially influenced by time, industry, crisis type, nation, and channel. So, JFK's sentiment about crises—that they are simultaneously dangerous and opportunities is true for both organizations and researchers. For researchers, this research demonstrates that despite a couple of decades of case studies and analytical connections between tactics, connecting them to stakeholders and outcomes that we are still merely

treading in largely uncharted international waters. The contexts in which we must understand, predict, and practice crisis response are only going to become more complex and we must respond.

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